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Dated: 11/15/02 Signature: Anna P. Lucey  
(Anna P. Lucey)

03CO *1686*

Docket No.: APBI-P05-035  
(PATENT) *5*

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Baltimore et al.

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NOV 29 2002

Application No.: 10/037341

Group Art Unit: 1636

Filed: January 4, 2002

Examiner: Not Yet Assigned

For: NUCLEAR FACTORS ASSOCIATED WITH  
TRANSCRIPTIONAL REGULATION

TECH CENTER 1600/2900

### INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents  
Washington, DC 20231

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned.

Applicants respectfully submit that no copy of any patent, publication, or other information listed on the enclosed Form PTO/SB/08 is necessary because the citations were made in prior application U.S.S.N. 08/464,364 filed on June 5, 1995 which is relied upon in this application for an earlier filing date under 35 U.S.C. 120.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents should one or more of the documents be applied against the claims of the present application.

Dated:

Respectfully submitted,

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Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION</b> IN AN APPLICATION (Use several sheets if necessary) <i>May 26 2002</i>	Docket Number (Optional)	Application Number
	APBI-P05-035	10/037,341
	Applicant	
	Baltimore et al.	
Filing Date	Group Art Unit	
January 4, 2002	1636	

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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**TECH CENTER 1600/2900****FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	AA WO 87/04170	7/16/87	PCT				

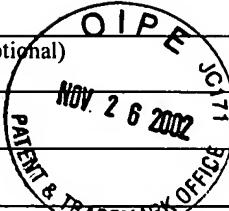
**OTHER DOCUMENTS***(Including Author, Title, Date, Pertinent Pages Etc.)*

AB	Baeuerle, P.A. & Baltimore, D. Activation of DNA-Binding Activity in an Apparently Cytoplasmic Precursor of the NF-kB Transcription Factor. <i>Cell</i> 53, 211-217 (1988).
AC	Baeuerle, P.A. & Baltimore, D. Activation of NF-kB: A Transcription Factor Controlling Expression of the Immunoglobulin k Light-Chain Gene and of HIV. <i>The Control of Human Retrovirus Gene Expression</i> , Banbury Conference, Cold Spring Harbor, NY 217-226 (1988).
AD	Baeuerle, P.A. & Baltimore, D. I kB: A Specific Inhibitor of the NF-kB Transcription Factor. <i>Science</i> 242, 540-546 (1988).
AE	Baldwin, A. & Sharp, P. et al. Binding of a Nuclear Factor to a Regulatory Sequence in the Promoter of the Mouse H-2Kb Class I Major Histocompatibility Gene. <i>Mol. Cell Biol.</i> 7, 305-313 (1987).
AF	Baldwin, A.S. Jr. & Sharp, P.A. Two Transcription factors, NF-kB and H2TF1, interact with a single regulatory sequence in the class I major histocompatibility complex promoter. <i>PNAS</i> 85, 723-727 (1988).
AG	Ballard, D.W. et al. HTLV-I Tax Induces Cellular Proteins that Activate the kB Element in the IL-2 Receptor a Gene. <i>Science</i> 241, 1652-1657 (1988).
AH	Banerji, J. et al. A Lymphocyte-Specific Cellular Enhancer is Located Downstream of the Joining Region in Immunoglobulin Heavy Chain Genes. <i>Cell</i> 33, 729-740 (1983).
AI	Bergman, Y. et al. Two Regulatory Elements for Immunoglobulin kappa light chain gene expression. <i>PNAS</i> 81, 7041-7045 (1984).
AJ	Blanar, M.A. et al. NF-kB Binds within a Region Required for B-Cell-Specific Expression of the Major Histocompatibility Complex Class II Gene Ead. <i>Mol. Cell Biol.</i> 9, 844-846 (1989).
AK	Bohnlein, E. et al. The Same Inducible Nuclear Proteins Regulates Mitogen Activation of Both the Interleukin-2 Receptor-Alpha Gene and Type I HIV. <i>Cell</i> 53, 827-836 (1988).
AL	Church, G.M. et al. Cell-type-specific Contacts to Immunoglobulin Enhancers in Nuclei. <i>Nature</i> 313, 798-801 (1985).

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		Applicant Baltimore et al.	
		Filing Date January 4, 2002	Group Art Unit 1636
AM	Cross, S.L. et al. Functionally Distinct NF- $\kappa$ B Binding Sites in the Immunoglobulin $\kappa$ and IL-2 Receptor alpha Chain Genes. <i>Science</i> 244, 466-469 (1989).		
AN	Davis, N. et al. Rel-Associated pp40: An Inhibitor of the Rel Family of Transcription Factors. <i>Science</i> 253, 1268-1271 (1991).		
AO	Fletcher, C. et al. Purification and Characterization of OTF-1, a Transcription Factor Regulating Cell Cycle Expression of a Human Histone H2b Gene. <i>Cell</i> 51, 783-793 (1987).		
AP	Foster, J. et al. An Immunoglobulin Promoter Displays Cell-Type Specificity Independently of the Enhancer. <i>Nature</i> 315, 423-425 (1985).		
AQ	Fried, M. & Crothers, D.M. Equilibria and Kinetics of lac Repressor-Operator Interactions by Polyacrylamide gel Electrophoresis. <i>Nucleic Acids Res.</i> 9, 6505-6524 (1981).		
AR	Garner, M.M. & Revzin, A. A Gel Electrophoresis Method for Quantifying the Binding of Proteins to Specific DNA Regions: Application to Components of the Escherichia coli Lactose Operon Regulatory System. <i>Nucleic Acids Res.</i> 9, 3047-3060 (1981).		
AS	Gerster, T. et al. Cell Type-Specificity Elements of the Immunoglobulin Heavy Chain Gene Enhancer. <i>EMBO J.</i> 6, 1323-1330 (1987).		
AT	Grosschedi, R. & Baltimore, D. Cell-Type Specificity of Immunoglobulin Gene Expression is Regulated by at Least Three DNA Sequence Elements. <i>Cell</i> 41, 885-897 (1985).		
AU	Goodbourn, S. et al. Human Beta-Interferon Gene Expression is Regulated by an Inducible Enhancer Element. <i>Cell</i> 41, 509-520 (1985).		
AV	Gosh, S. & Baltimore, D. Activation in vitro of NF- $\kappa$ B by phosphorylation of its inhibitor I $\kappa$ B. <i>Nature</i> 344, 678-682 (1990).		
AW	Haskill, S. et al. Characterization of an Immediate-Early Gene Induced in Adherent Monocytes that Encodes I $\kappa$ B-like Activity. <i>Cell</i> 65, 1281-1289 (1991).		
AX	Johnston et al. Present Status and Future Prospects for HIV Therapies. <i>Science</i> 260, 1286-1293 (1993).		
AY	Karin, M. et al. Activation of a Heterologous Promoter in Response to Dexamethasone and Cadmium by Metallothionein Gene 5' Flanking DNA. <i>Cell</i> 36, 371-379 (1984).		
AZ	Kawakami, K. et al. Identification and Purification of a Human Immunoglobulin-Enhancer-Binding Protein (NF- $\kappa$ B) that Activates Transcription from a Human Immunodeficiency Virus Type 1 Promoter in Vitro. <i>PNAS</i> 85, 4700-4704 (1988).		
BA	Ko, H.-S. et al. A Human Protein Specific for the Immunoglobulin Octamer DNA Motif Contains a Functional Homeobox Domain. <i>Cell</i> 55, 135-144 (1988).		
BB	Landolfi, N.F. et al. Interaction of cell-type-specific Nuclear Proteins with Immunoglobulin V <sub>H</sub> Promoter Region Sequences. <i>Nature</i> 323, 548-551 (1986).		
BC	Lenardo, M.J. et al. NF- $\kappa$ B Protein Purification from Bovine Spleen: Nucleotide Stimulation and Binding Site Specificity. <i>PNAS</i> 85, 8825-8829 (1988).		

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			Group Art Unit 1636
	BD	Lenardo, M.J. et al. Protein-Binding Sites in Ig Gene Enhancers Determine Transcriptional Activity and Inducibility. <i>Science</i> 236, 1573-1577 (1987).	
	BE	Leonard et al. Interleukin 2 Receptor Gene Expression in Normal Human T Lymphocytes. <i>PNAS</i> 82, 6281-6285 (1985).	
	BF	Leung, K. & Nabel, G.J. HTLV-1 Transcription Induces Interleukin-2 Receptor Expression Through an NF-kB-like Factor. <i>Nature</i> 333, 776-778 (1988).	
	BG	Mason, J.O. et al. Transcription Cell Type Specificity is Conferred by an Immunoglobulin V <sub>H</sub> Gene Promoter That Includes a Functional Consensus Sequence. <i>Cell</i> 41, 479-487 (1985).	
	BH	Mercola, M. et al. Immunoglobulin Heavy-Chain Enhancer Requires One or More Tissue-specific Factors. <i>Science</i> 227, 266-270 (1985).	
	BI	Mercola, M. et al. Transcriptional Enhancer Elements in the Mouse Immunoglobulin Heavy Chain Locus. <i>Science</i> 221, 663-665 (1983).	
	BJ	Nabel, G. & Baltimore, D. An Inducible Transcription Factor Activates Expression of Human Immunodeficiency Virus in T Cells. <i>Nature</i> 326, 711-713 (1987).	
	BK	Nelsen, B. et al. The NF-kB-Binding Site Mediates Phorbol Ester-Inducible Transcription in Nonlymphoid Cells. <i>Mol. Cell Biol.</i> 8, 3526-3531 (1988).	
	BL	Nelson, K.J. et al. Inducible Transcription of the Unrearranged κ Constant Region Locus is a Common Feature of the Pre-B Cells and Does Not Require DNA or Protein Synthesis. <i>PNAS</i> 82, 5305-5309 (1985).	
	BM	Picard, D. & Schaffner, W. A Lymphocyte-specific Enhancer in the Mouse Immunoglobulin kappa Gene. <i>Nature</i> 307, 80-82 (1984).	
	BN	Queen, C. & Baltimore, D. Immunoglobulin Gene Transcription is Activated by Downstream Sequence Elements. <i>Cell</i> 33, 741-748 (1983).	
	BO	Queen, C. & Stafford, J. Fine Mapping of an Immunoglobulin Gene Activator. <i>Mol. Cell Biol.</i> 4, 1042-1049 (1984).	
	BP	Ruben, S. et al. Cellular Transcription Factors and Regulation of IL-2 Receptor Gene Expression by HTLV-1 tax Gene Product. <i>Science</i> 241, 89-92 (1988).	
	BQ	Sassone-Corsi, P. et al. A Trans-acting Factor is Responsible for the Simian Virus 40 Enhancer Activity in Vitro. <i>Nature</i> 313, 458-463 (1985).	
	BR	Scheidereit, C. et al. Identification and Purification of a Human Lymphoid-Specific Octamer-Binding Protein (OTF-2) that Activates Transcription of an Immunoglobulin Promoter in Vitro. <i>Cell</i> 51, 783-793 (1987).	
	BS	Sen, R. & Baltimore, D. Inducibility of κ Immunoglobulin Enhancer-Binding Protein NF-κB by a Posttranslational Mechanism. <i>Cell</i> 47, 921-928 (1986).	
	BT	Sen, R. & Baltimore, D. Multiple Nuclear Factors Interact with the Immunoglobulin Enhancer Sequences. <i>Cell</i> 46, 705-716 (1986).	

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		Filing Date January 4, 2002	
	BU	Singh, H. et al. A Nuclear Factor that Binds to be Conserved Sequence Motif in Transcriptional Control Elements of Immunoglobulin Genes. <i>Nature</i> 319, 154-158 (1986).	
	BV	Staudt, L. et al. Cloning of a Lymphoid-specific cDNA Encoding a Protein Binding the Regulatory Octamer DNA Motif. <i>Science</i> 241, 577-580 (1988).	
	BW	Staudt, L.M. et al. A Lymphod-specific Protein Binding to the Octamer Motif of Immunoglobulin Promoter in Vitro. <i>Nature</i> 323, 640-643 (1986).	
	BX	Strauss, F. & Varshavsky, A. A Protein Binds to a Satellite DNA Repeat at Three Specific Sites that Would be Brought into Mutual Proximity by DNA Folding in the Nucleosome. <i>Cell</i> 37, 889-901 (1984).	
	BY	Treisman, R. Transient Accumulation of c-fos RNA Following Serum Stimulation Requires a Conserved 5' Element and c-fos 3' Sequences. <i>Cell</i> 42, 889-902 (1985).	
	BZ	Wall, R. et al. A Laible Inhibitor Blocks Immunoglobulin k-light-chain-gene Transcription in a Pre-B Leukemic Cell LIne. <i>PNAS</i> 83, 295-298 (1986).	
	CA	Wirth, T. & Baltimore, D. Nuclear factor NF-kB can Interact Functionally with its Cognate Binding Site to Provide Lymphoid-Specific Promotor Function. <i>EMBO J.</i> 7, 3109-3113 (1988).	
	CB	Wu et al. Purification of the Human Immunodeficiency Virus Type 1 Enhancer and TAR Binding Proteins EBP-1 and UBP-1. <i>EMBO J.</i> 7, 2117-2129 (1988).	
	CC	Zabel, U. & Baeurle, P. Purified Human IkB can Rapidly Dissociate the Complex of the NF kB Transcription Factor with its Cognate DNA. <i>Cell</i> 61, 255-265 (1990).	
EXAMINER		DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.			

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